

MEMORANDUM

To: Legislative Oversight and Communications Appropriations Subcommittee and
Parties interested in the creation of the Information Technology Department

From: Doug Wulf and Glen Dickinson

Date: March 19, 1999

Re: Tuesday, March 16 Information Technology Department Meeting

Attached are the working papers generated by the Work Group at the last meeting. In addition, a list of participants who attended the meeting is included.

The second meeting was again facilitated by Dr. Jamie Ferrare, Dean, School of Education, Drake University.

Information Technology Department

Possible Mission Statement:

The Department of Technology will offer efficient and effective customer service by providing the infrastructure, content, and fiscal responsibility required for the twenty-first century.

Who are our customers?

ICN	IT	IPTV
Authorized users <ul style="list-style-type: none">• Education• Government• TeleMedicine• State departments• County offices• National Guard• Citizens (Ed. Events)• Libraries• Private telecommunications• Provider	<ul style="list-style-type: none">• State departments• Citizens/Taxpayers• lowAccess	<ul style="list-style-type: none">• All Iowans• Education<ul style="list-style-type: none">• K-12• Community Colleges• Lifelong learners• AEA's

Current Functions:

- Technology/Information Technology
- Bits Transmission
- Content
- Broadcasting
- Fiscal
- Legal
- Purchasing – Expertise
- Education Technology Support – Customer need
- Security – Prevent unauthorized use/transmission
- ICN
- Planning
- ITS
- Digital Information - Efficiencies
- Project Management
- Purchasing/Billing
- Standards
- Applications Development Services

Critical Issues:

- Continuity of services to customers
- Identifying customer needs

- Timeline for services
- Decisions in timely manner
- Workforce Recruitment/Retention
- Relationship – Maintain and strengthen
- Legal – Regulatory
 - FCC License Requirements
 - Debt Service
- Future trends – needs
- Funding

What could be???

Past + Present = Future

Past + Present = Present

- Electronic Commerce
- Access to content – easily/readily
 - Quality the issue
- Data Warehousing
- Communications
- New information model – movement of information
- Funding stratagem (R&R)
- Quality knowledge management
- Global Information Systems
- Wireless

Significant Focus for New Department:

- Customer Services
- Efficiency
- Coordination
- Creativity/innovation
- Synergy
- More effective learning opportunity
- Consensus building

Organizational structure:

- Functions/Relationships
- Mission Statement

- Umbrella – Functions
- Fiscal responsibility
- Eliminate duplication
- Address legal concerns
- Decision-making – “Who”

How to prepare?

- Plan
- Managers share information and ideas
- Future strategists
- Test and try/decide
- Constant assessment and evaluation
- Anticipate desired future
- Customer participation
- Stakeholders participation
- Communication
- Implementation
- Evaluate

What did meeting accomplish?

- Focus
- Add structure to process
- Agreement on some common ground
- Appreciate opportunity for support
- Greater understanding
- Change is a positive
- Lower anxiety
- Stakeholders develop structure

What next?

- Organization chart proposal
 - Committee of department heads generate proposal for structure
 - Legislature review proposal and adopt

Next meeting:

- IPTV – Department Heads

- ICN – Board Input
- IT – Executive Branch
- Legislative Branch
- Iowa Telecommunications Committee

Need to Generate:

- Mission statement
- Goals
- Guiding principles

ATTACHMENT A

Group 1 Notes

Current Functions:

- Wide Area Network

- Carrier Transport vs Local Area Network
- ICN takes information from point A to point B (Digitized movement over wide and local area networks)
- ICN manages router for local agencies (360)
- ICN runs mail hub for state
- Statewide telecommunications contracts
 - Including for ICN itself
 - Purchasing function (telecommunications & ICN purchasing) used to be done by General Services.
- ITS deals only with ITS purchases. DGS and individual agencies also purchase some of their goods.
 - DGS – “lets” contracts for things like hardware, PCs. etc.
 - Scattered purchasing
- Standards
 - ITS does standard planning
 - ITS does security for enterprise
- Data
 - Mainframe (storage of data)
 - Application development (DRF, ITS, & DGS all do it)
 - ITS manages data and data storage
 - Write programs
 - ICN does not have a good deal of data management. ICN delivers data
 - ITS manages information
- ICN runs net service center
 - Along with McLeod USA (private vendor)
- ICN runs trouble ticketing
 - Along with McLeod USA
 - 20,000 member community – down to telephone
- ITS has help desks for applications
- ITS manages LANs including their own
- ICN Billing & Collection
 - ICN has automated system
 - Contract with private and local telephone exchanges in one stop shop
 - Collect for all of these private carriers, etc.
 - Track hours/billing
 - Over \$30 million of revenue collected
- Critical Issues/Concerns to Mission
 - Legal (FCC autonomy) – must do’s and don’ts
 - IPTV Board has responsibility with “dotted line” to agency

- Identify customer needs (strategic plan)
- Duplication needs to be addressed
- What's the structure
- Decision-making responsibility
 - Statute and consolidation
- Funding
- Availability of workforce
 - Need to retain high qualified people (also keep our employees)
 - High demand of employees and cannot match private companies dollars
 - State is training ground for private industry
 - Cannot compete with dollars of private industry
- Pace of technology – how quick it changes
 - Current technology
 - Decision-making needs to be timely and take advantage of time
 - Today it is delay drive decision-making
- Consensus building/collaboration
- Protection of hierarchy structure
 - Agencies think of themselves first before whole
 - i.e., routers/turf protection
 - No standard to have agencies operate in holistic manner
 - Needs to be customer needs first

Critical Issues:

- Services = a quality product
 - Quality of services
 - Timeliness
 - Efficiency – compare different ways
 - Cost efficiencies
 - Cross over agency lines – Delivery of service
 - Customer driven service and what customer wants
 - Common services identified and consolidated
 - Retain uniqueness in subordinate agencies
- Resources
 - Sustain resources so they are up to date/not obsolete
 - On-going process
 - Infrastructure
 - Quality people
 - Maintain security – protect resources/data
 - Software is a huge resource – need standards

- Legal
 - Comply with law and licenses, regulations
 - Will not effect legal issues if autonomy changes IPTV
 - ICN rates/internet service providers into voice services
 - Adjustments & cost models by outside forces
- Innovation
 - Drives change
 - Hardware and software
 - Streamline
 - Meet needs of user
 - Consensus – model for decision-making
- Funding
 - More latitude for users = pass more cost to users
 - Set up funding structure – self sufficiency over time (goal)
 - Subsidy by State of Iowa (especially for education)
 - Combination of billing and appropriation
- Relationships
 - Streamline responsibility – overlap – clarity of responsibility
 - Legislative relationships
 - Trust – how do agencies to better?
 - Private telecommunications shooting at ICN, etc.
 - Head of Dept. of Technology
 - Where is commission/board?
 - Board provides more than one in mind – example DOT – Balance
 - Redesign commission/boards
 - IPTV unique due to FCC license

Future/Iowa Technology Department

IPTV

- Digital TV
- New Distance Education
- New platforms for educational programming
- Transmit data over HDTV
- Interactive educational programming
 - Currently CD-Rom platform along with VHS
- “Content providers”

ICN

- Still in training/paying off debt/Part III build-out

- No level of maturity until build-out complete
- More bandwidth and effective usage of bandwidth
- Fiber is cost effective and will be utilized
- Build-out to future utilization
- Wireless costs are very expensive for transmitting high levels of bandwidths
- Create video cache – to disseminate to schools on demand, cheaply
 - Intranet (requires a lot of bandwidths) needs quality and efficiency
- Develop customer training

ITS

- Data warehousing/GIS/Internet/Document Management
- Has not been a leader in technology – were more of an infrastructure shop
 - Data organization (GIS information)

Needs:

- Strategic planning
 - Alignment with customer needs
- Technology drives transformation
- Data warehousing equals patterns through data mining
- Questions: Where does it end? How much is enough?

ATTACHMENT B

Group 2 Notes

Critical Functions:

- Broadcasting – IPTV statewide
 - Public TV & Educational services
 - Produce and acquire video production
- Contact purchasing
- IPTV technology assists for interactive classrooms - ICN
- Produce educational programs for other technology, other education
- Teacher workshops
- Save on tech team with Department of Education
- Universal services for school districts
- Liaison between K-12, Community Colleges, and Board of Regents. Distance education works with all.
- Installation of voice and data systems
- Maintenance of fiber optic
- Transmitter maintenance
- Maintenance – broadcast engineering
- Maintain Iowa database on distance learning for all sectors of education
- IowaAccess
- Catalog for distance learning – one stop shopping for higher education
- Selection of hardware, software, R&D guidelines on how these are used. Audit functions
- Customer support and liaison base to group
- Training
- Over the air broadcast
- Interstate/international relationships
- ICN internet, other communication functions
- Staff function – computer software area
- IPTV computers specific to broadcasting

2 year – 5 year – 10 year Vision

- ICN
 - Prepare content
 - Production technology
 - Better prepared content
 - Content with IT with network
 - Everybody brings it together
- Communication to audience – keep state of air content and resources to end users.
Training – effectively use the technology
- Enterprise Technology
 - Get at a lower cost
 - Procure content for the State of Iowa. Gives a much lower cost
 - Ability to distribute content to all Iowans
 - Use existing distribution to get to people – ICN, IPTV, IT
 - Create a synergy to bring to next level
- How do you get knowledge management?
 - ICN would be conduit
 - Relationships with users and departments
- Electronic Commerce
- Focus on communications
 - Technology and hardware changes
 - Get the people to get the ideas
 - Facilitate the education process
- Analysis with Deere and Company
 - Rotate the people
- Get commonality
- Services available
 - Dial-in to government
 - Digital information
 - Service delivery
- Pose the challenge to certain groups to support this infrastructure.
 - What is already there
 - Production
- Information management
 - Don't know where to go and get the information
 - How does average citizen get information
- Integration between level of government
- Economic Development – Quality of life

- Education side
- Building skills
- Technology in state valuable for economic development
- Value for new business opportunities
- R&D next generation technologies
- Policies that make money available
- Allowing risks in agencies
- Collaboration – value in doing it

Critical Issues:

- Services – “Identify who the customer is?”
 - Effectively manage expectations
 - Equity to all departments and other customers
 - Acquisition and production of content
 - Integration and coordination
 - Quality
- Human Resources
 - Leadership – top level strategists
 - Content – applications
 - Maintenance of a system – commonality
 - Strategy people at central office
- Legal
 - FCC license requirements
 - Thinking legally out of box – there may be better way to do it to meet legal requirements
 - Not assume but ask
 - Timing issue of legality
 - ICN debt service
- Innovations
 - Contracts
 - Leadership in technology
 - Technology applications for education
 - Usefulness
 - Cost/benefits
 - Receptive to users and outside world
 - Equity and distribution of technology –catching up
 - Coordination
- Funding
 - Cost/benefits analysis – standardize methodology
 - Adequate funding

- Market comparative levels
- Relationships
 - Commitment and work
 - Trust
 - Need them and want them
 - Seek to better serve the customer
 - Coordinated information – avoid duplication

Future/Iowa Technology Department

- Continuity of operations – service
- Don't lose focus on customer needs
- Legal issues
- Security
- Regulatory – FCC license
- How we are going to pay for it
- Maintaining and strengthening current relationships
- Plan for integrated hardware and software
- Standards
- Identification of technology for new business
- Highly skilled staff
- Timeframe for reorganization – staged integration transition
- Conversion to digital TV
- Planning – vision for future
- Market-based cost/pricing
- IPTV, ICN, IT – what elements can best use umbrella and what remain autonomous
- Billing functions
- R&D – next generation of technology. Most common of three.
- Customer service

Work Session Attendees:

Curt Stamp	US West
Dave Arringdale	IT
Dave Bolender	IPTV
Don Thoms	DOT
Doug Wulf	Legislative Fiscal Bureau
Glen Dickinson	Legislative Fiscal Bureau
Harold Thompson	ICN
Jamie Fitzgerald	Senate Democratic Caucus
Kent Hiller	IowaAccess
Larry Murphy	Judicial Department
Lon Anderson	House Republican Caucus
Lynn Walding	Iowa Attorney General's Office
Mary Braun	House Democratic Caucus
Mike Ralston	US West
Molly Phillips	IPTV
Nancy Richardson	DOT
Ned Chido	US West
Pamela Pfitzenmaier	IPTV
Representative Bradley	House
Representative Falck	House
Representative Huser	House
Representative Jacobs	House
Representative Jenkins	House
Representative Kettering	House
Rich Jacobs	Revenue & Finance
Richard Johnson	Auditor of State
Scott Iverson	Senate Page
Senator King	Senate
Tami Fujinaka	ICN
Ted Stilwill	Department of Education
Richard Varn	IT
Tom Shepard	IT
Wesley Whithead	House Republican Caucus

